

03060106-050

(Savannah River)

General Description

Watershed 03060106-050 is located in Edgefield and Aiken Counties and consists primarily of the *Savannah River* and its tributaries from the Stevens Creek Dam to Upper Three Runs. The watershed occupies 40,964 acres of the Piedmont, Sand Hills, and Upper Coastal Plain regions of South Carolina. The predominant soil types consist of an association of the Fuquay-Troup-Cataula-Cecil series. The erodibility of the soil (K) averages 0.20, and the slope of the terrain averages 7%, with a range of 0-15%. Land use/land cover in the watershed includes: 42.9% forested land, 20.7% forested wetland, 15.5% agricultural land, 11.1% urban land, 5.2% barren land, 4.0% water, and 0.6% nonforested wetland.

This section of the Savannah River accepts drainage from its upper reaches, together with Reed Creek*, Fox Creek (Pole Branch), Rock Creek*, the Horse Creek watershed, the Dead River (oxbow), and Butler Creek*. An asterisk connotes a stream entering from the Georgia side of the river. Further downstream, the river accepts drainage from Spirit Creek*, Pine Creek (Hardens Dead River, Horseshoe Lake, Clarkes Lake), the Hollow Creek watershed, Berryhill Gut (Coleman Lake), High Bank Creek*, McBean Creek*, Boggy Gut Creek*, Bent Lake, and Newberry Creek*. There are a total of 121.8 stream miles and 184.8 acres of lake waters within the South Carolina portion of the watershed, all classified FW. Redcliffe State Park resides in this watershed, as does a portion of the federally owned Savannah River Plant.

Surface Water Quality

| <u>Station #</u> | <u>Type</u> | <u>Class</u> | <u>Description</u> |
|------------------|-------------|--------------|---|
| SV-251 | P | FW | SAVANNAH RIVER AT US 1, 1.5 MI SW N.AUGUSTA |
| SV-252 | P | FW | SAVANNAH RIVER AT SC 28, 1.6 MI NNW OF BEECH ISLAND |
| SV-323 | P | FW | SAVANNAH RIVER AT LOCK AND DAM |

Savannah River – There are three stations along this section of the Savannah River. Recreational uses are fully supported **at all sites**, and a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter **at all sites**. At the upstream site (**SV-251**), aquatic life uses are fully supported; however, there is a significant increasing trend in total phosphorus concentration. There is also a significant decreasing trend in pH. Significant decreasing trends in five-day biochemical oxygen demand and total nitrogen concentration suggest improving conditions for these parameters.

Aquatic life uses are also fully supported further downstream (**SV-252**). There is a significant decreasing trend in pH. Significant decreasing trends in five-day biochemical oxygen demand, turbidity, and total nitrogen concentration suggest improving conditions for these parameters. At the furthest downstream site (**SV-323**), aquatic life uses are fully supported. There is a significant decreasing trend in pH. Significant decreasing trends in five-day biochemical oxygen demand and total nitrogen concentration suggest improving conditions for these parameters. In sediments, a high concentration of mercury was detected in the 1996 sample and dibutyl phthalate was detected in the 1999 sample.

A fish consumption advisory has been issued by the Department for mercury and includes the Savannah River within this watershed (see advisory p.107).

NPDES Program

Active NPDES Facilities

RECEIVING STREAM

FACILITY NAME

PERMITTED FLOW @ PIPE (MGD)

NPDES#

TYPE

COMMENT

SAVANNAH RIVER TRIBUTARY

ECW&SA/WTP

PIPE #: 001 FLOW: M/R

SCG645036

MINOR INDUSTRIAL

SAVANNAH RIVER

KIMBERLY-CLARK CORP./BEECH ISLAND

PIPE #: 001 FLOW: 11.452

SC0000582

MAJOR INDUSTRIAL

SAVANNAH RIVER

SCE&G/URQUHART STEAM STATION

PIPE #: 001 FLOW: 190

PIPE #: 002, 003 FLOW: M/R

SC0000574

MAJOR INDUSTRIAL

SAVANNAH RIVER

AIKEN PSA/HORSE CREEK WWTP

PIPE #: 001 FLOW: 26.0

SC0024457

MAJOR INDUSTRIAL

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

LANDFILL NAME

FACILITY TYPE

PERMIT #

STATUS

MASONS TREE & TURF FARM

INDUSTRIAL

IWP-182

CLOSED

SCE&G URQUART

INDUSTRIAL

023320-1601

ACTIVE

SCE&G URQUART

INDUSTRIAL

IWP-009

INACTIVE

KIMBERLY-CLARK CORP.

INDUSTRIAL

SCD042971069

ACTIVE

Land Application Sites

LAND APPLICATION SYSTEM

FACILITY NAME

ND#

TYPE

INFILTRATION POND

BEECHWOOD SD

ND0067113

DOMESTIC

Mining Activities

| <i>MINING COMPANY MINE NAME</i> | <i>PERMIT # MINERAL</i> |
|--|------------------------------------|
| THE MARTIN GROUP RAIFORD PIT | 1009-03 SAND/CLAY |
| HANSON AGGREGATES SOUTHEAST BEECH ISLAND PLANT #1 | 0801-03 SAND/GRAVEL |
| WERTS EQUIPMENT RENTAL, INC. BEECH ISLAND MINE | 0845-03 SAND/CLAY |

Water Quantity

| <i>WATER USER STREAM</i> | <i>TOTAL PUMP. CAPACITY (MGD) RATED PUMP. CAPACITY (MGD)</i> |
|---|---|
| ECWSA SAVANNAH RIVER | 10.0 7.0 |
| CITY OF NORTH AUGUSTA SAVANNAH RIVER | 25.8 14.0 |

Growth Potential

There is a moderate potential for growth in this watershed, which contains portions of the Town of Jackson and the City of North Augusta. The City of North Augusta is currently experiencing a northward push towards I-20 and Augusta, Georgia. This growth is primarily residential and commercial; the trend is expected to continue. Projected growth includes the area surrounding the seven interchanges of I-20 in Aiken County, particularly in the intersection of I-20 and S.C. Hwy 19, and that of I-20 and U.S. Hwy 1. S.C. 19 is expected to be widened to four lanes in the near future.